



NOAA's National Weather Service

Water Supply Forecast & Summer Outlook

Pacific Northwest Drought Outlook
May 4, 2015

Troy Lindquist
NWS Boise, ID

Outline

- Precipitation
- Snow
- Water Supply Forecasts
- Seasonal Outlook



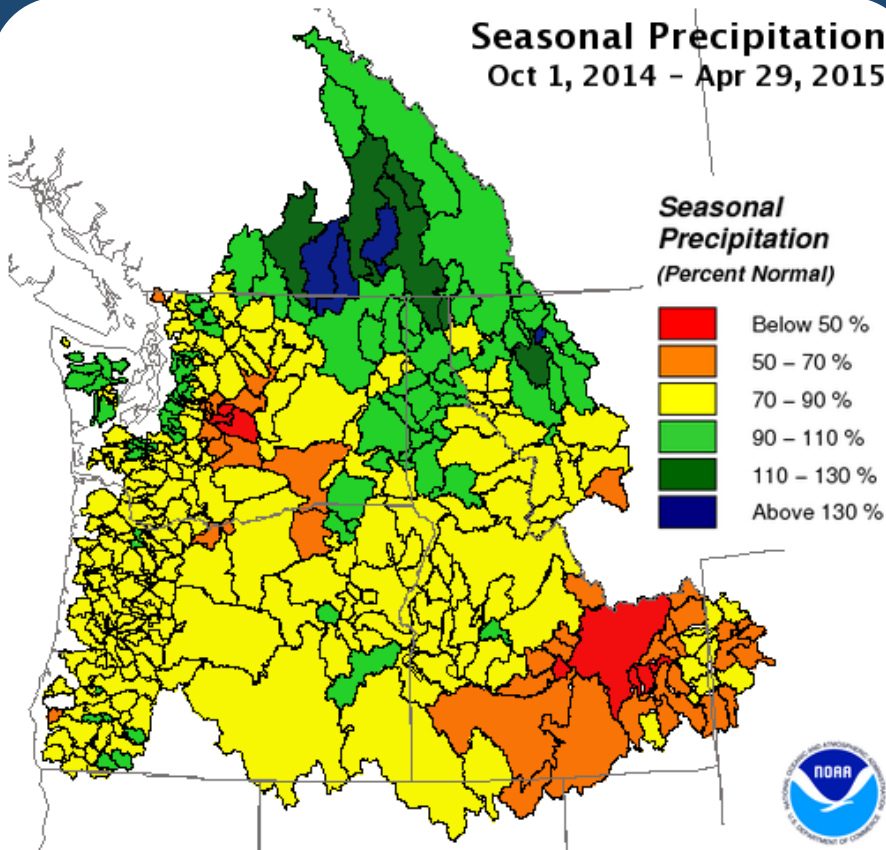
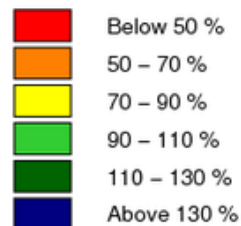
Observed Seasonal Precipitation

2015 Water Year

March 2015

Seasonal Precipitation
Oct 1, 2014 - Apr 29, 2015

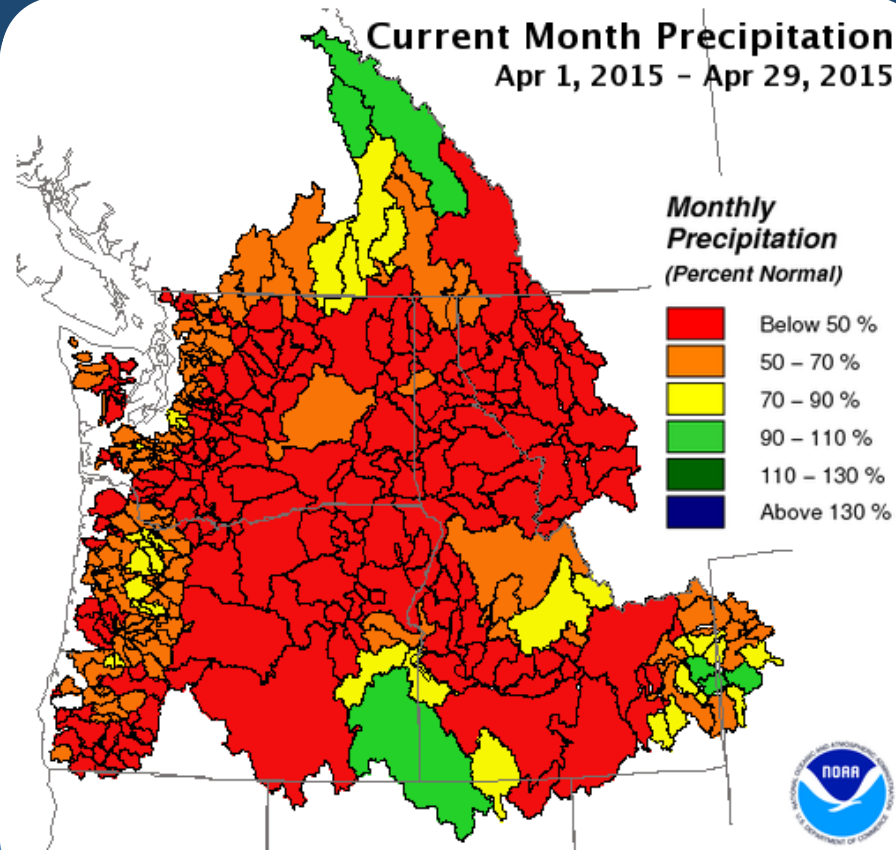
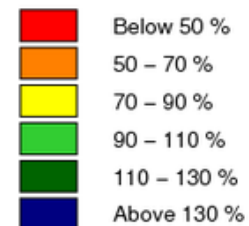
**Seasonal
Precipitation**
(Percent Normal)



Creation Time: Thursday, Apr 30, 2015 Northwest River Forecast Center

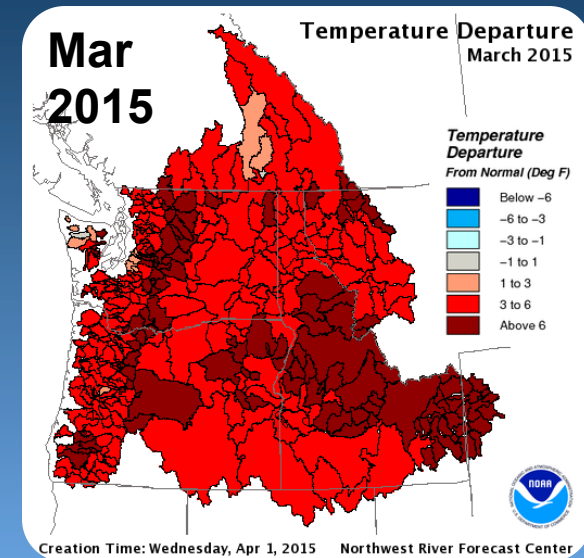
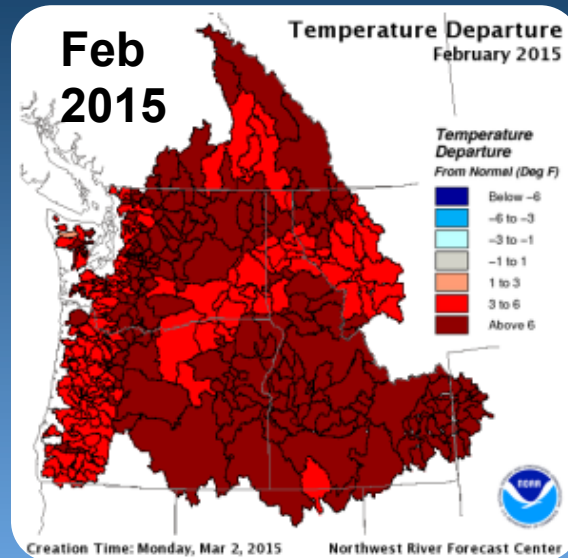
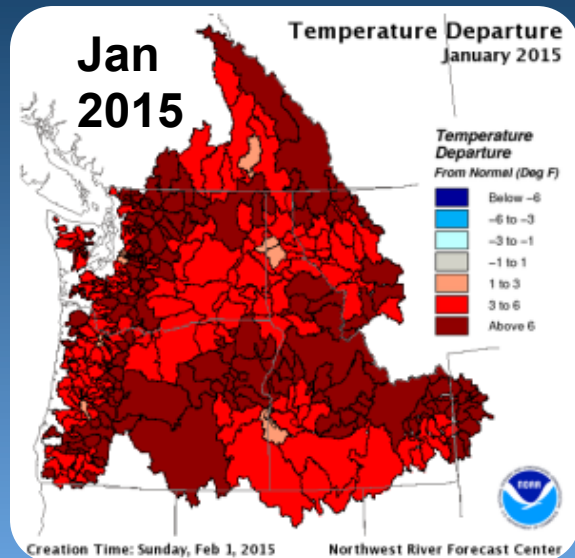
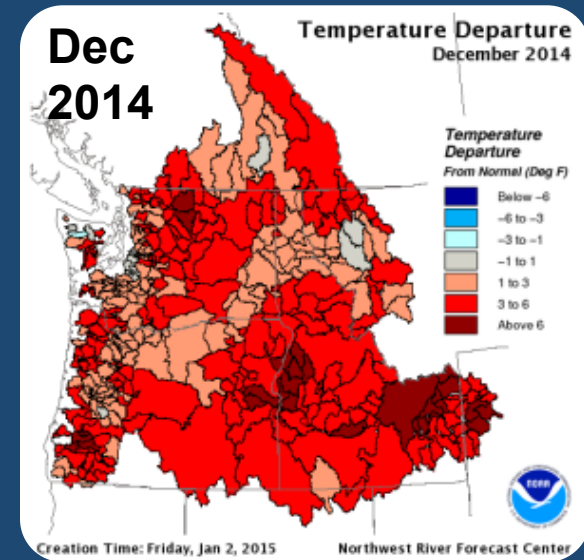
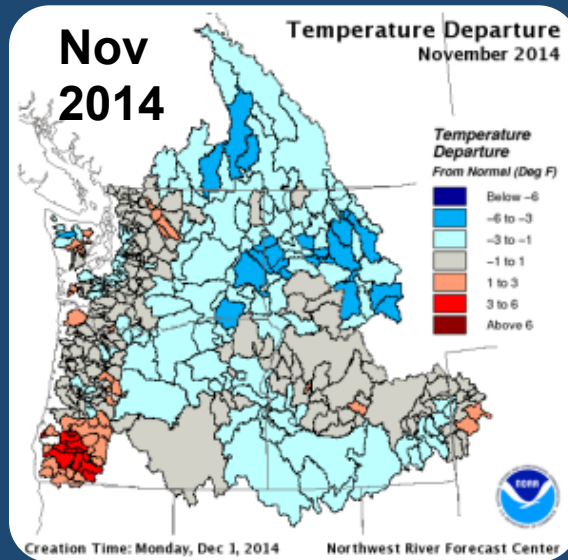
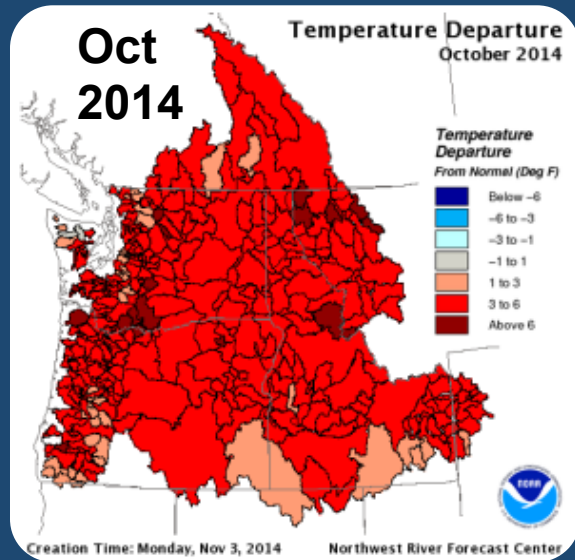
Current Month Precipitation
Apr 1, 2015 - Apr 29, 2015

**Monthly
Precipitation**
(Percent Normal)



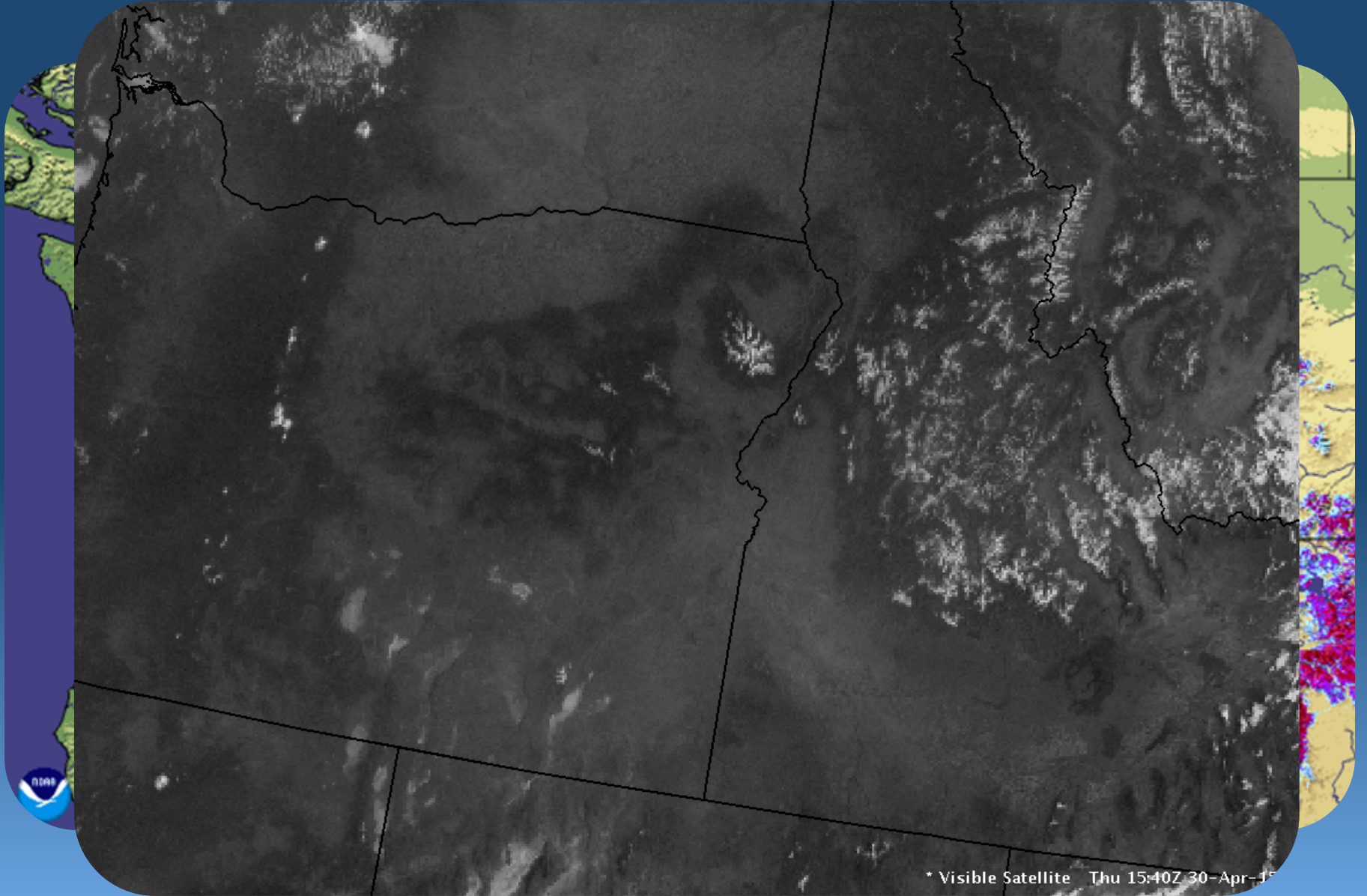
Creation Time: Thursday, Apr 30, 2015 Northwest River Forecast Center

Observed Seasonal Temperatures

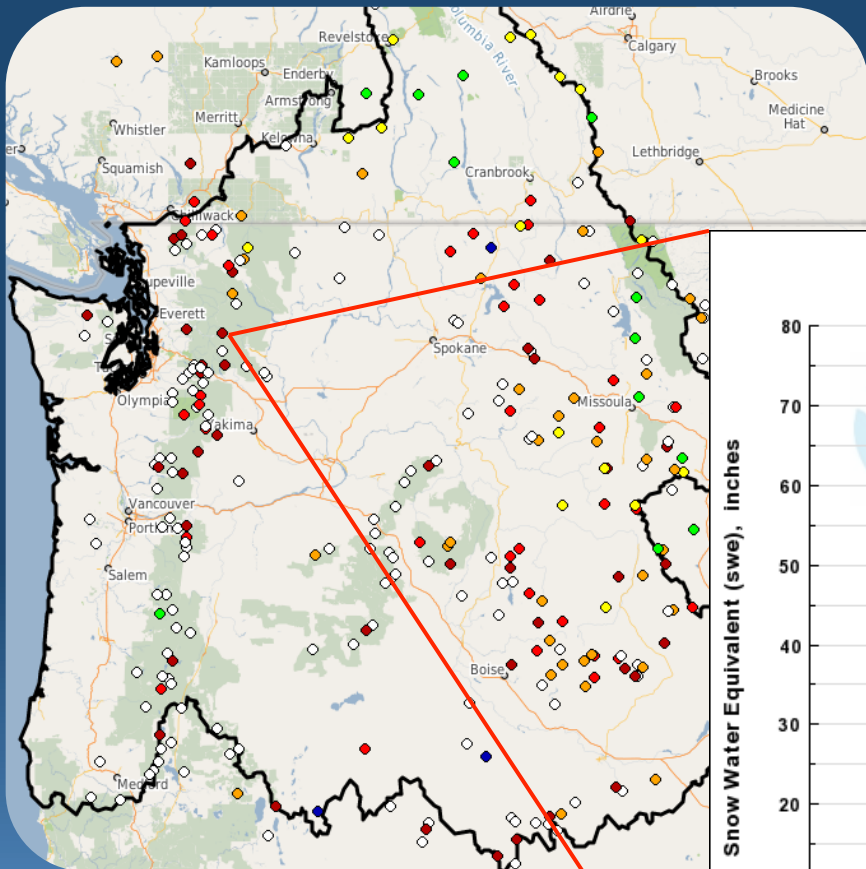




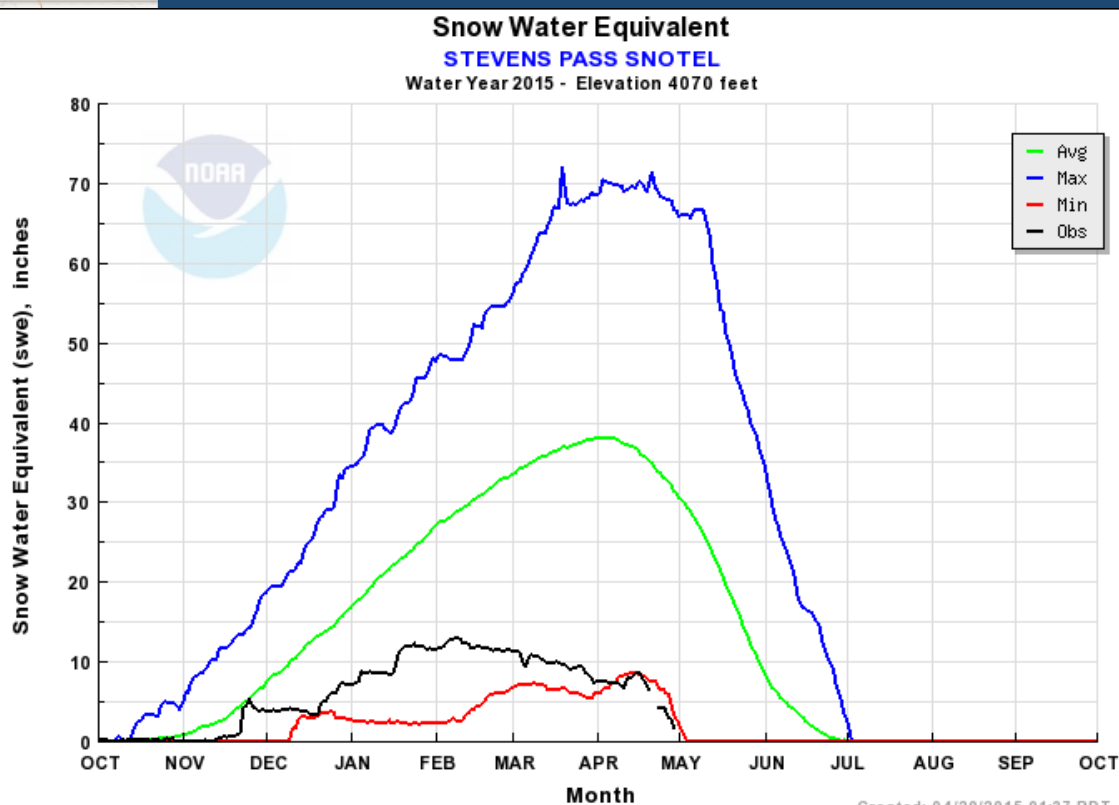
Observed Snowpack Conditions



Observed Snowpack Conditions



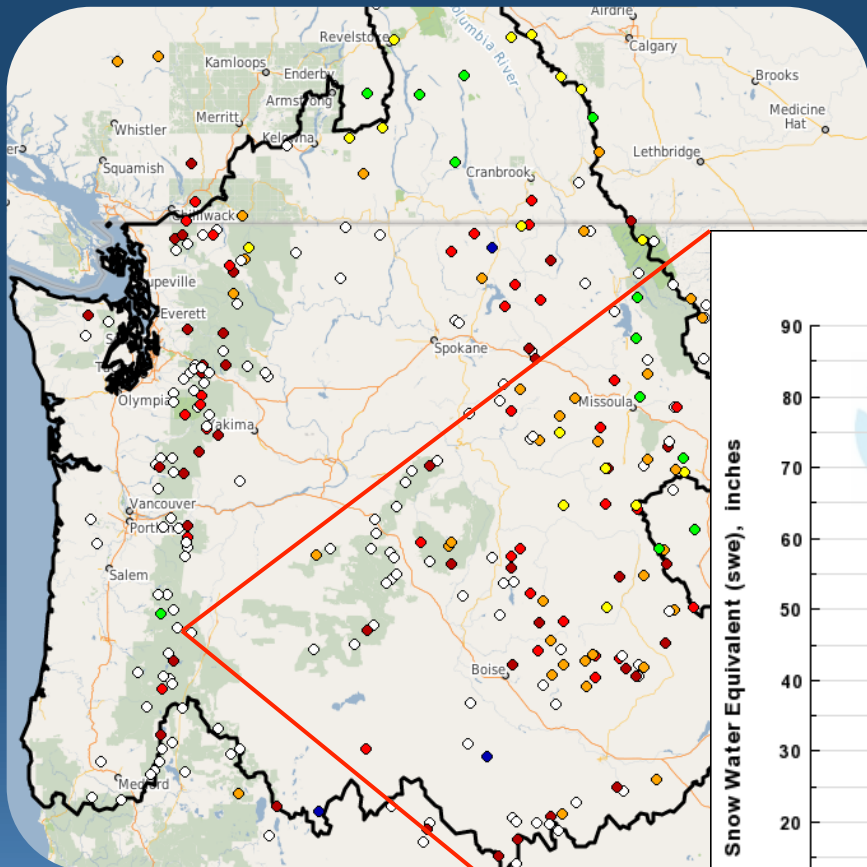
Stevens Pass
Elev. 4070 feet



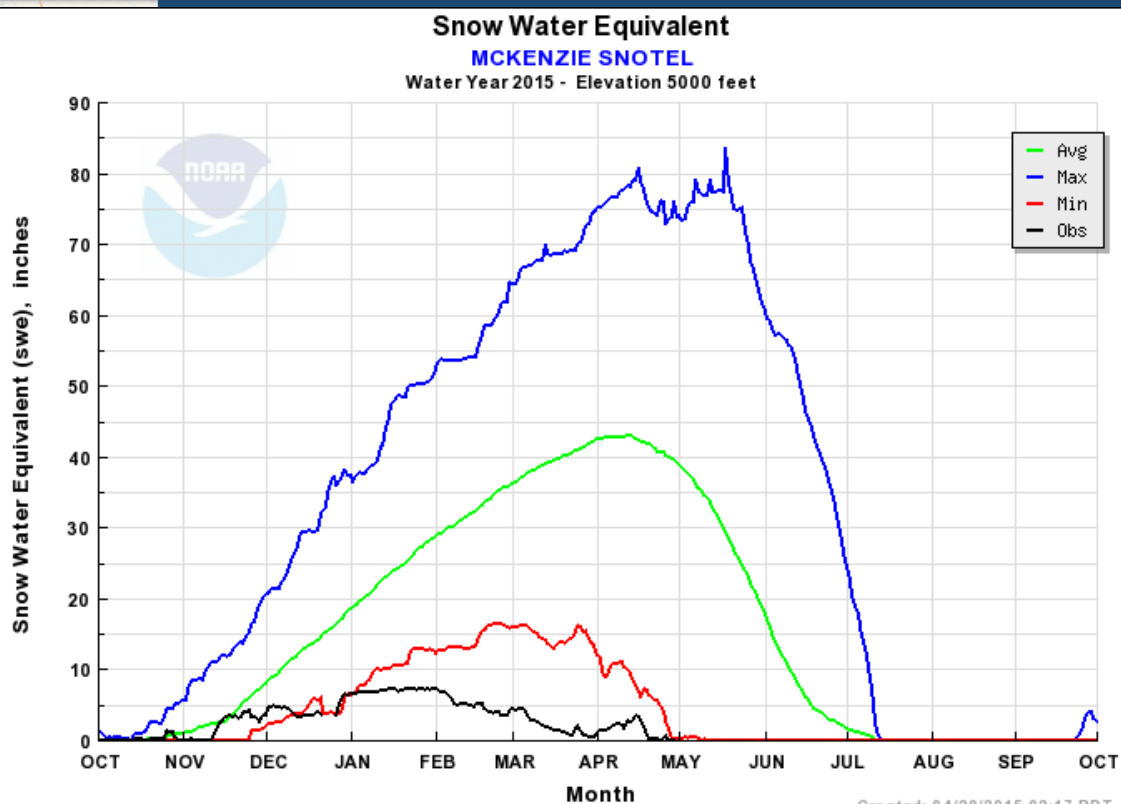
SWE values provided by:
NRCS & Environment Canada

NWRFC: www.nwrfc.noaa.gov

Observed Snowpack Conditions



McKenzie
Elev. 5000 feet



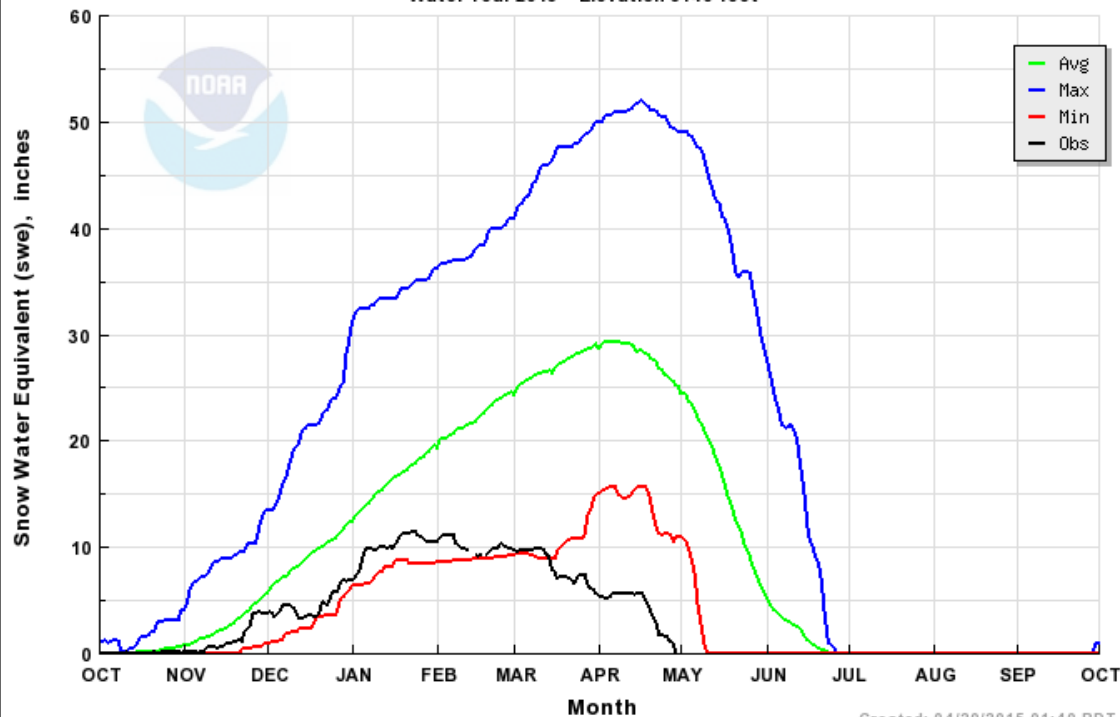
SWE values provided by:
NRCS & Environment Canada

NWRFC: www.nwrfc.noaa.gov

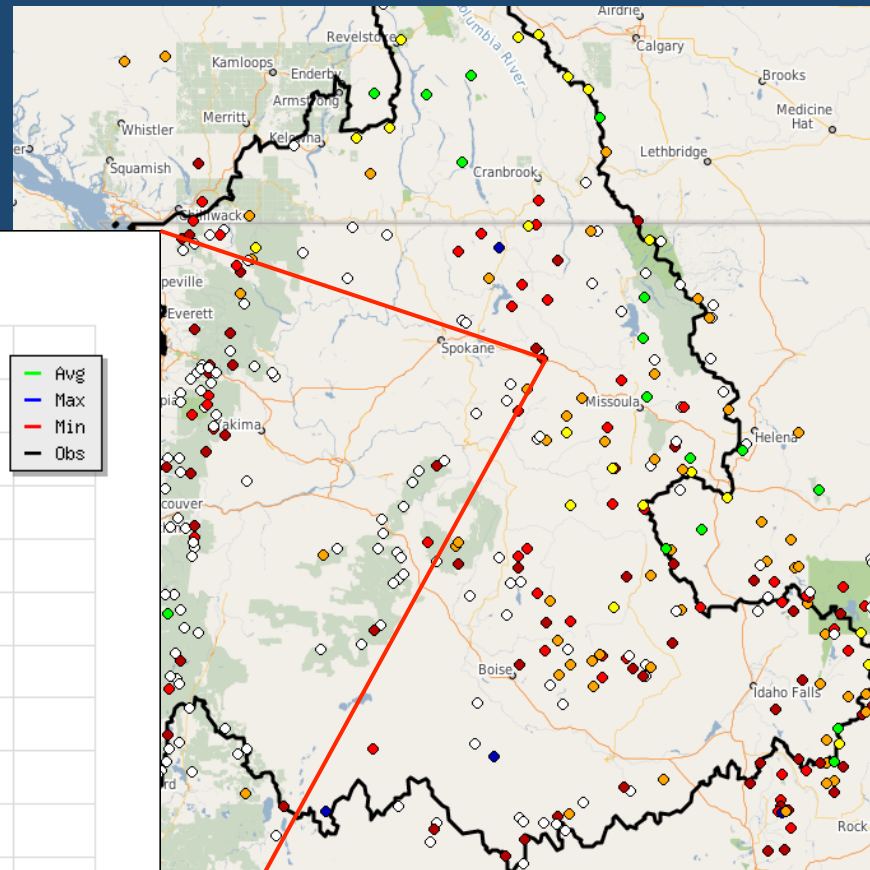
Observed Snowpack Conditions

Lookout Pass
Elev. 5140 feet

Snow Water Equivalent
LOOKOUT PASS
Water Year 2015 - Elevation 5140 feet



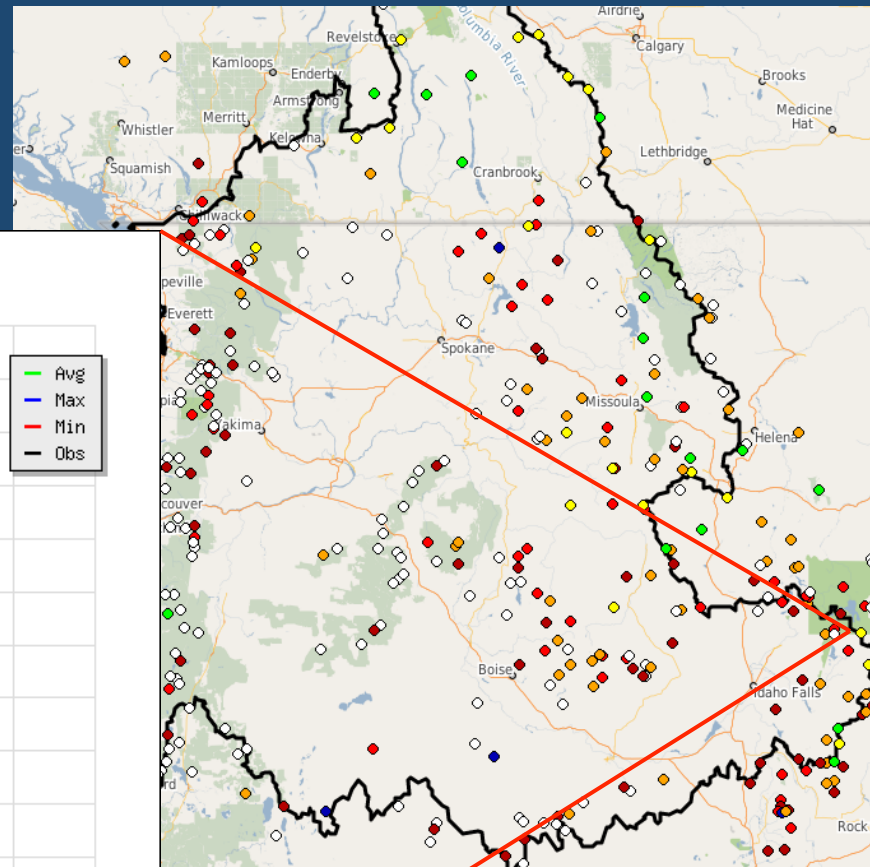
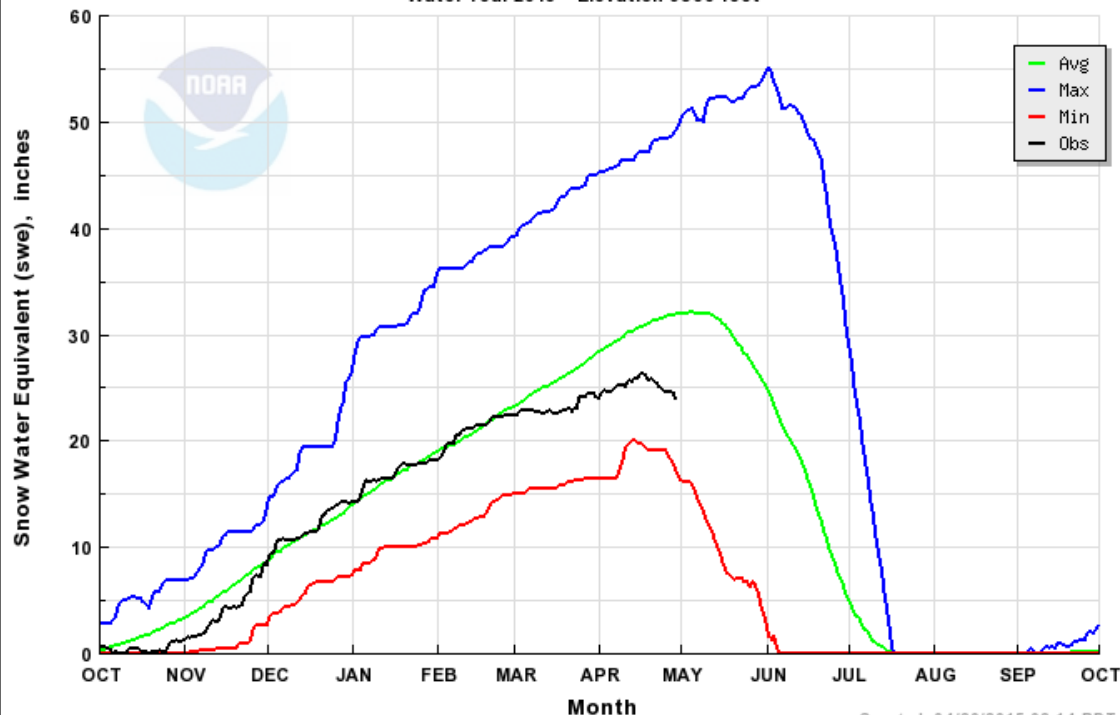
Created: 04/29/2015 01:49 PDT



Observed Snowpack Conditions

Two Ocean Plateau
Elev. 9360 feet

Snow Water Equivalent
TWO OCEAN PLATEAU SNOTEL
Water Year 2015 - Elevation 9360 feet

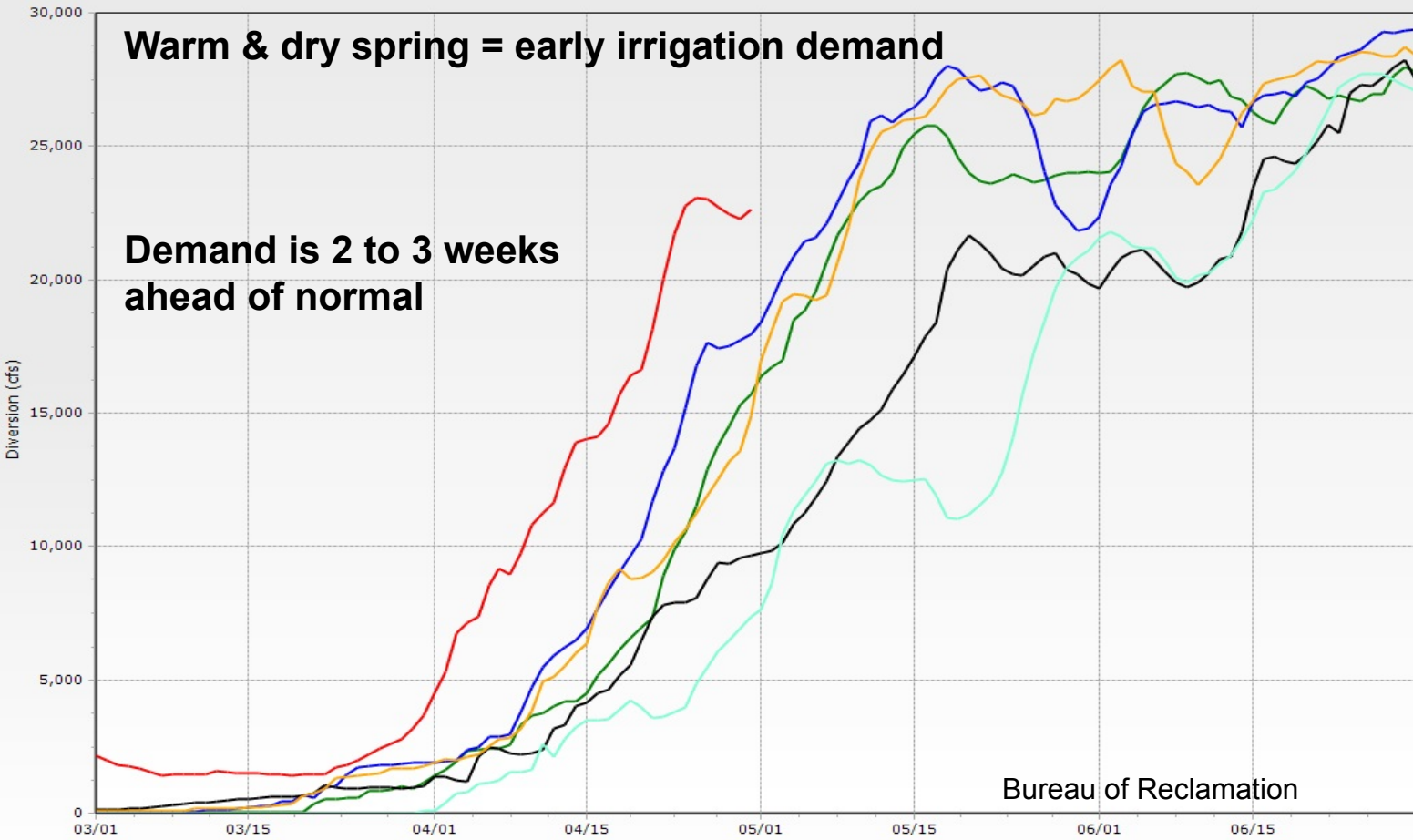




Upper Snake Reservoir System

Upper Snake River Total Diversions

2015 2013 2012 2010 2007 2005

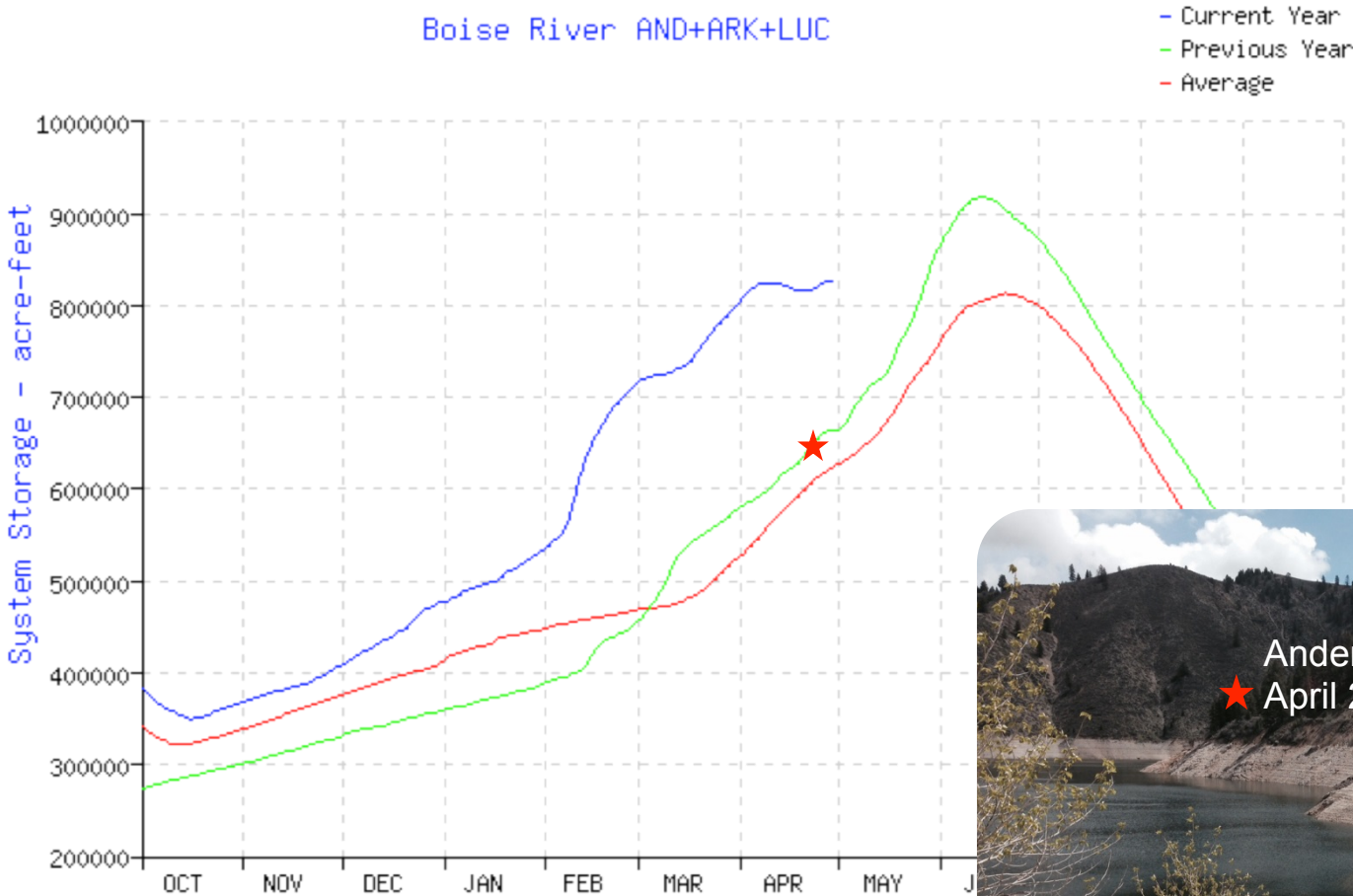




Boise Reservoir System



Boise River AND+ARK+LUC



Bureau of Reclamation

WY2015

04/30/2015 05:44

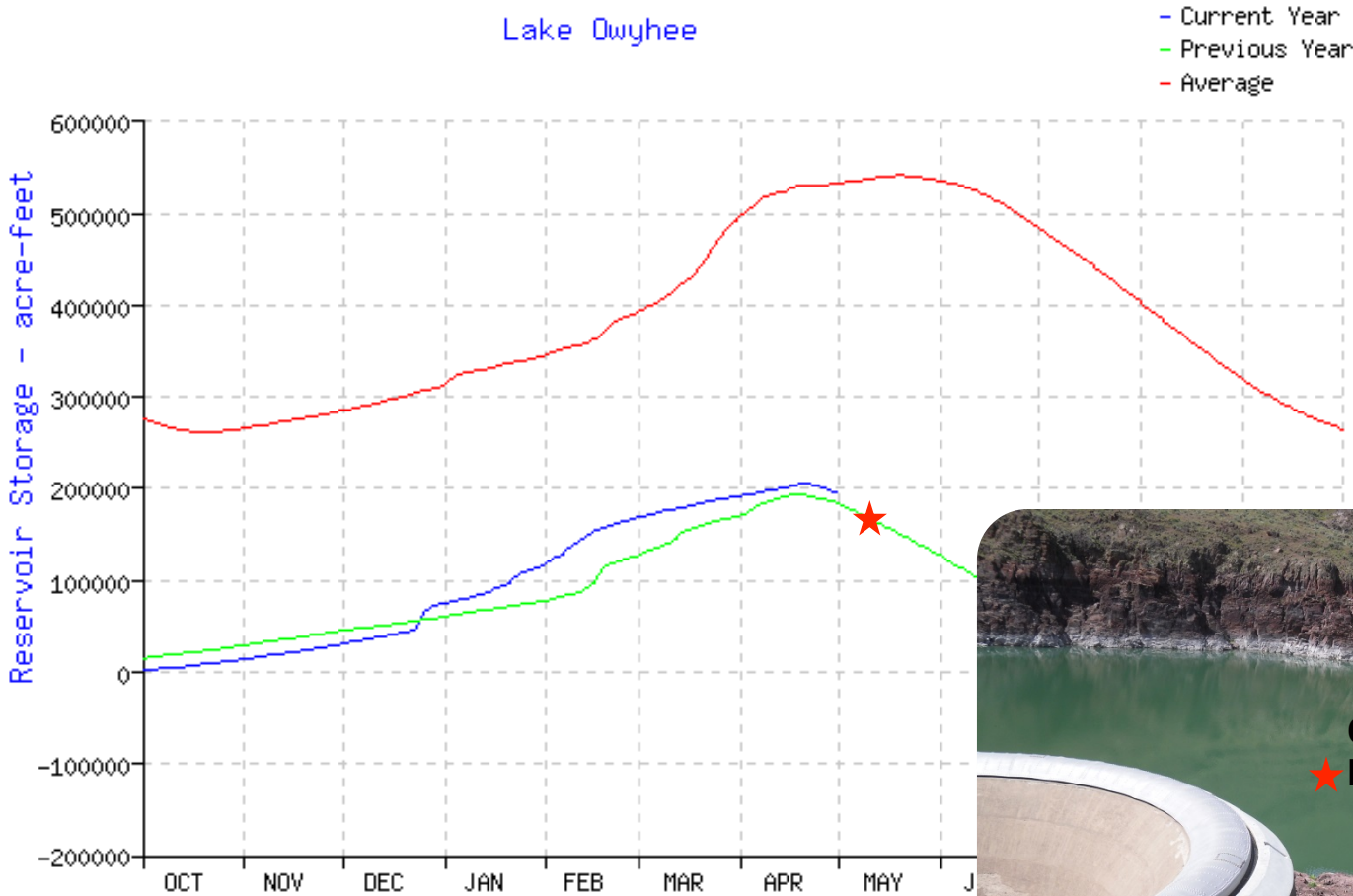




Owyhee Reservoir



Lake Owyhee



Bureau of Reclamation

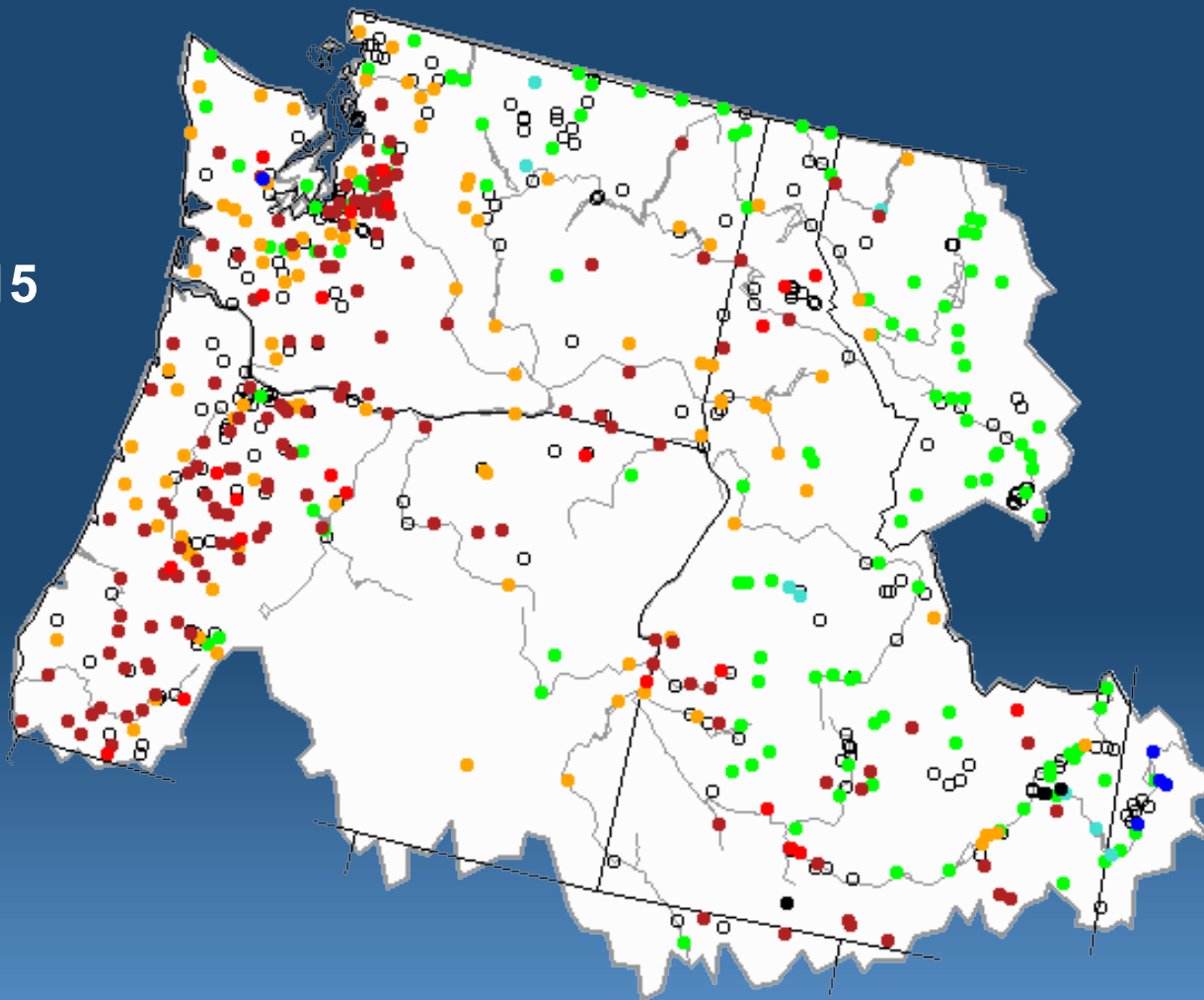
WY2015

4/30/2015 05:43











7-Day Average Streamflow

April 30, 2015

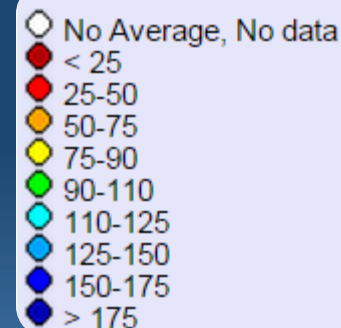
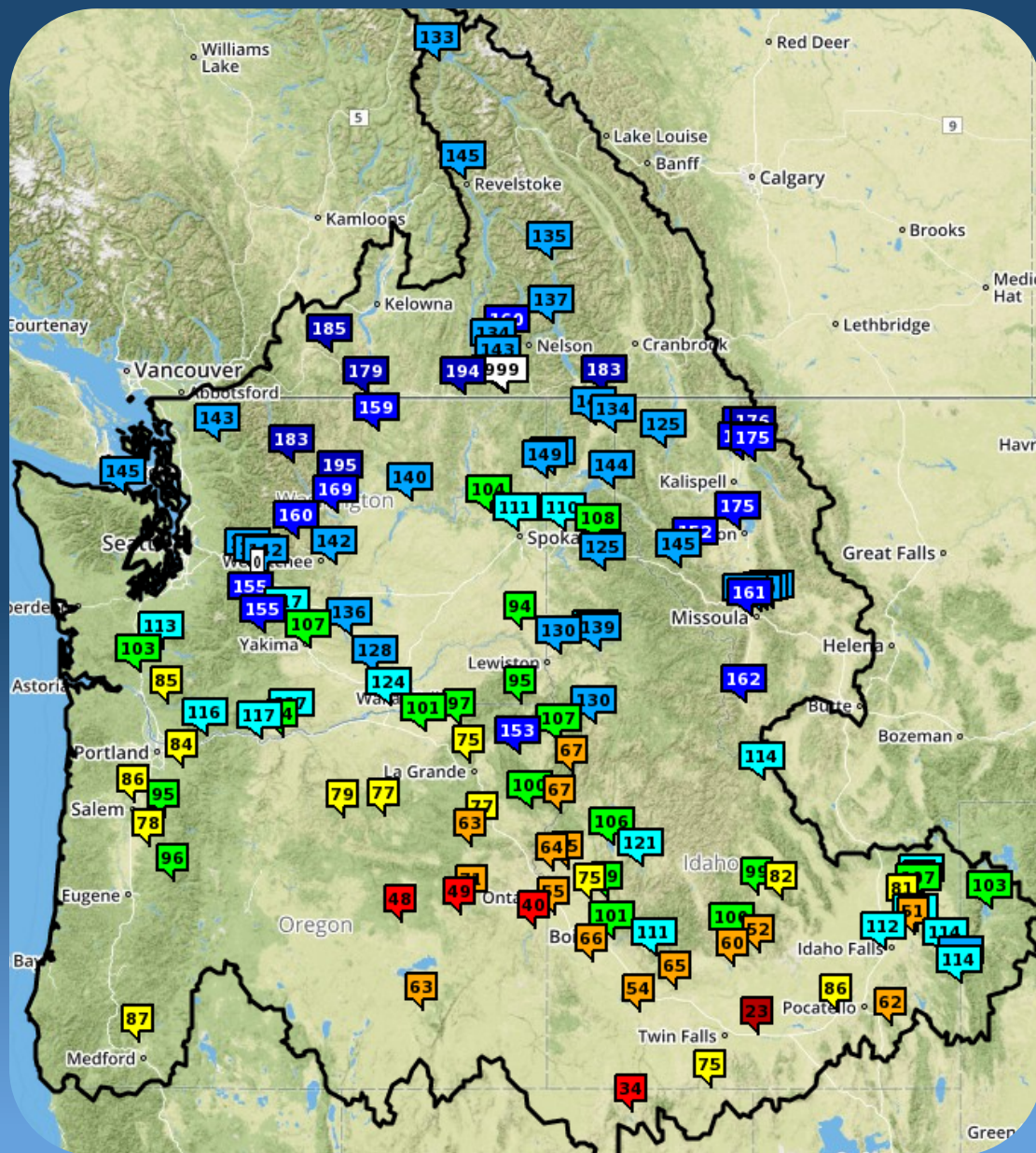


Explanation - Percentile classes

							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

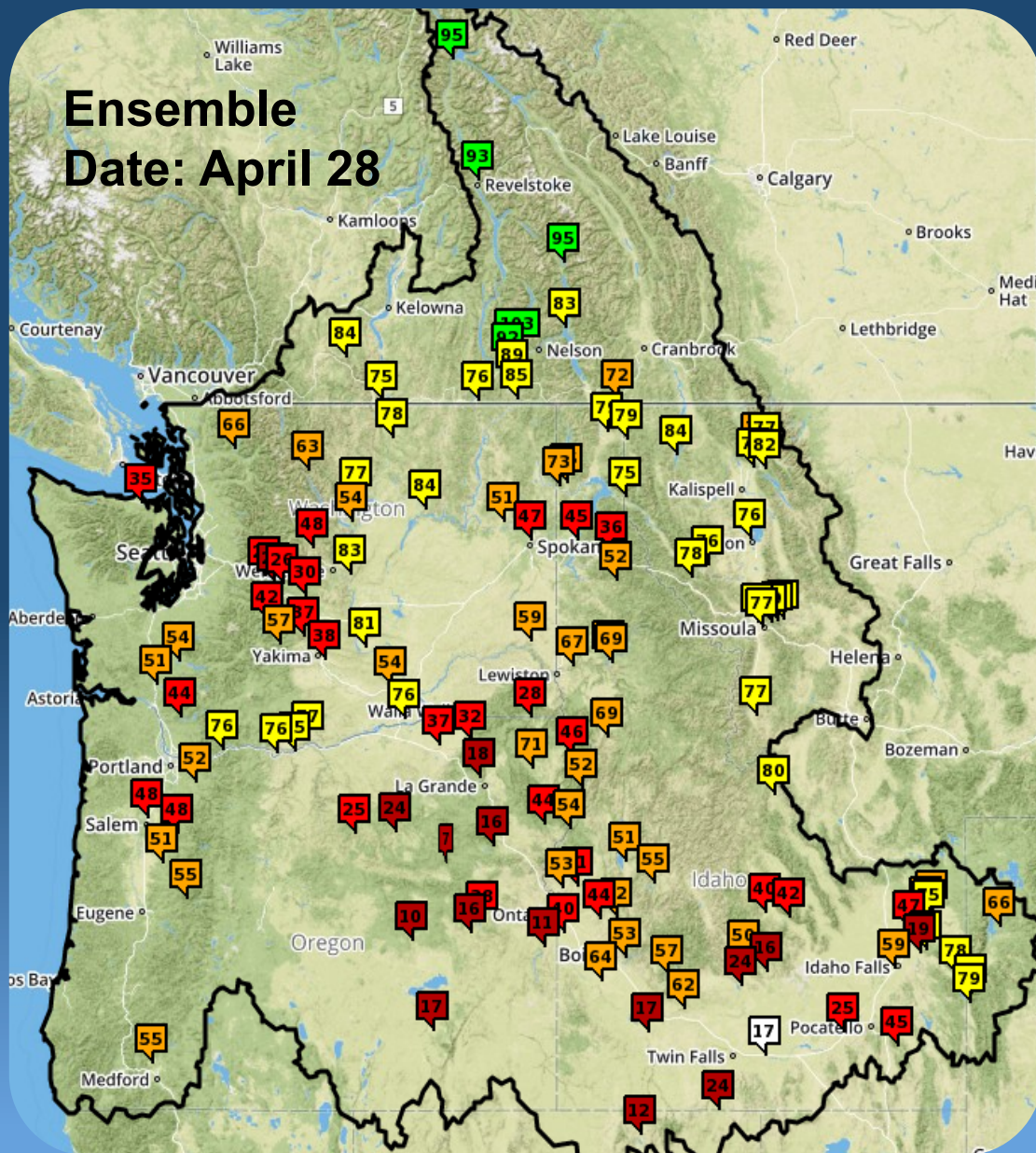
Observed Runoff Conditions

Observed Runoff
Period: Oct – Apr 28
(% Avg)

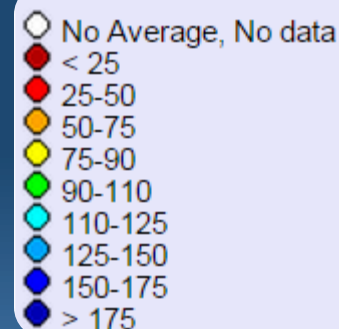


Observed runoff
adjusted for changes in
upstream storage

Official Water Supply Forecasts



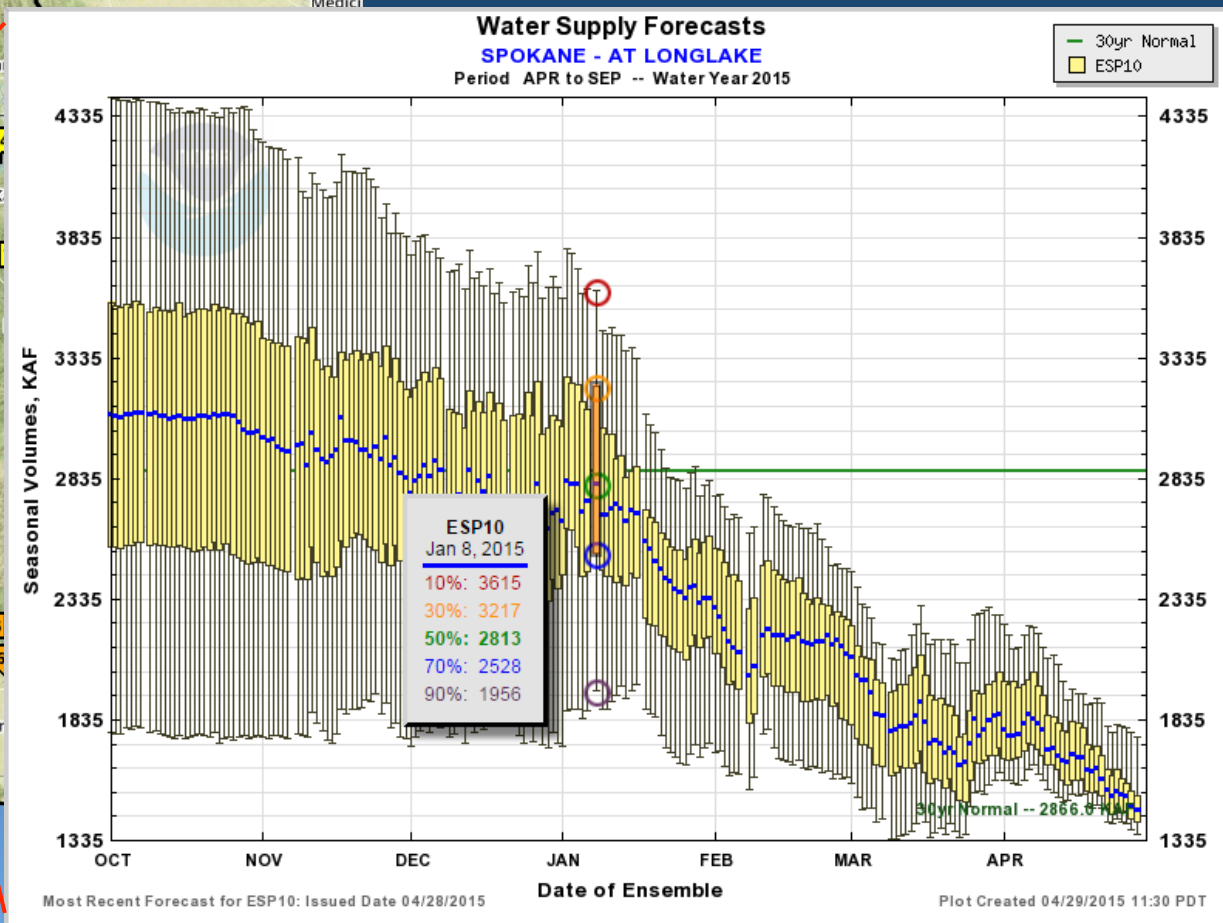
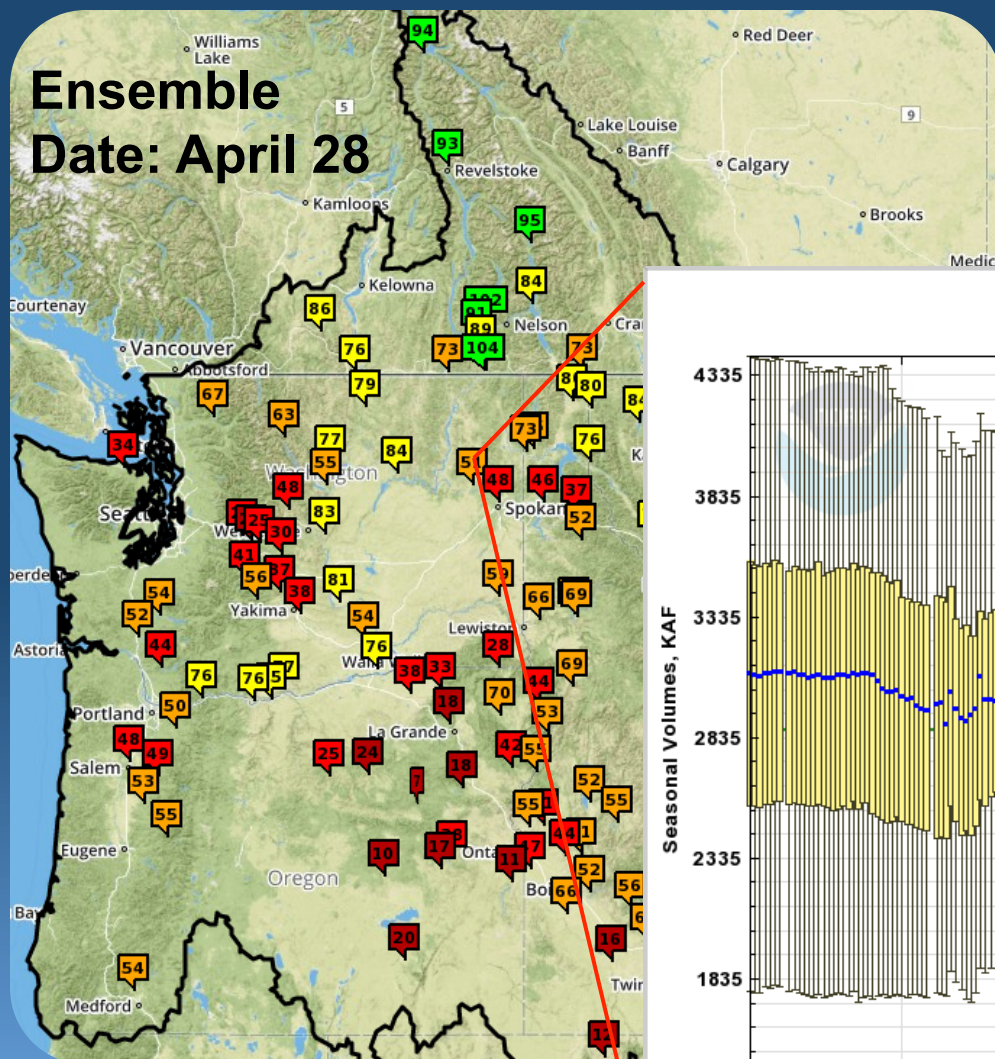
Water Supply Fcst
Period: Apr - Sep
(% Avg)



Official Water Supply Forecasts

Ensemble
Date: April 28

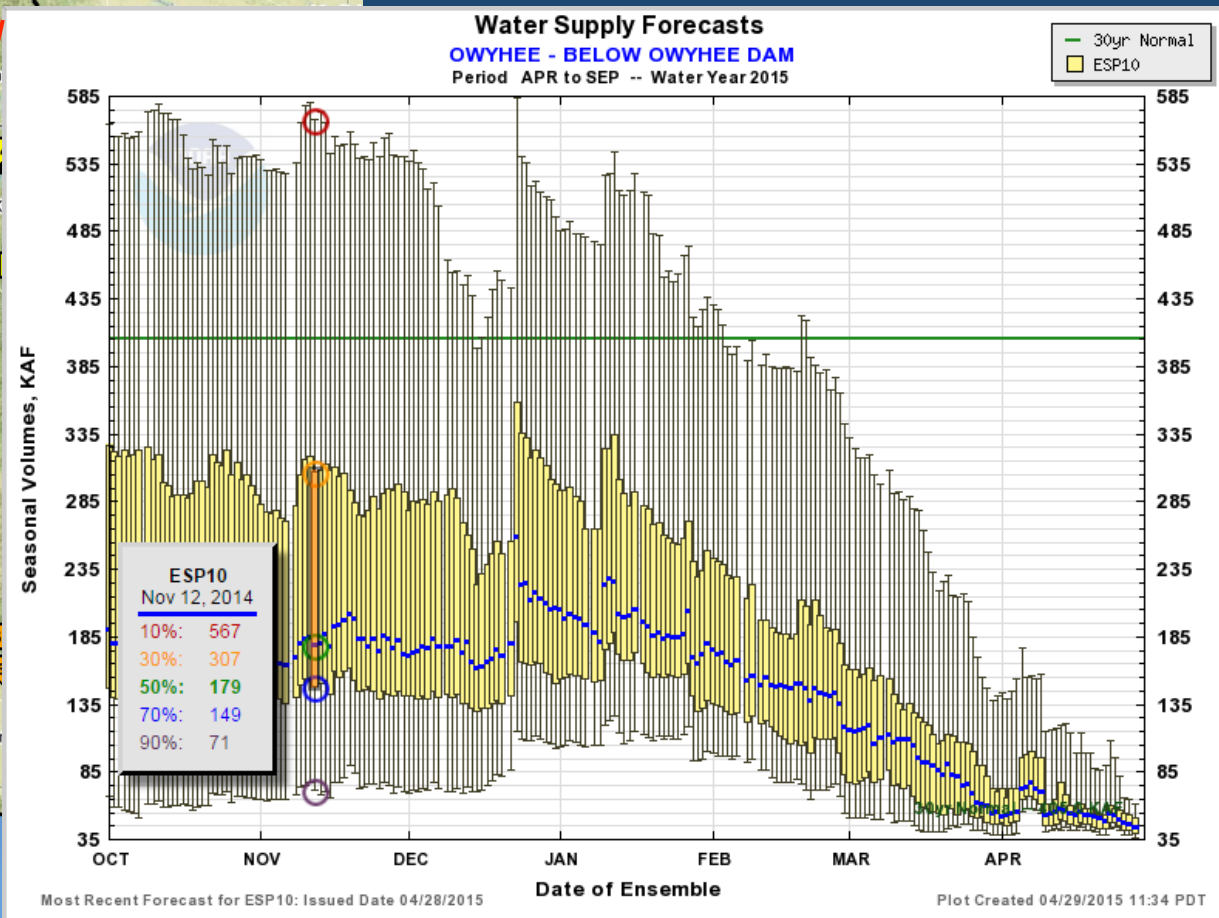
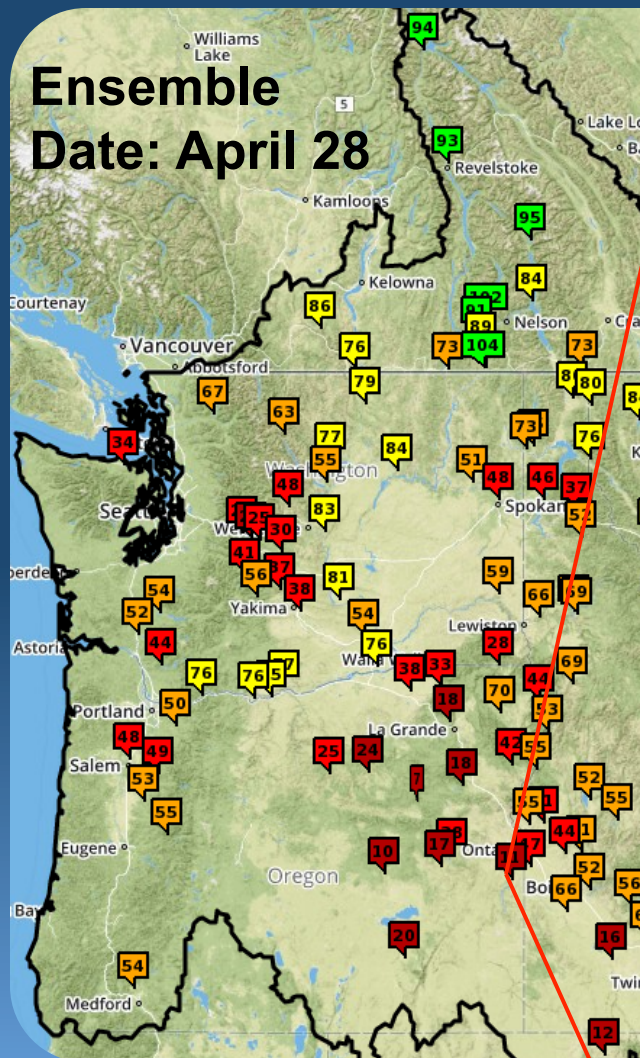
**Spokane River at
Longview**



Official Water Supply Forecasts

Ensemble
Date: April 28

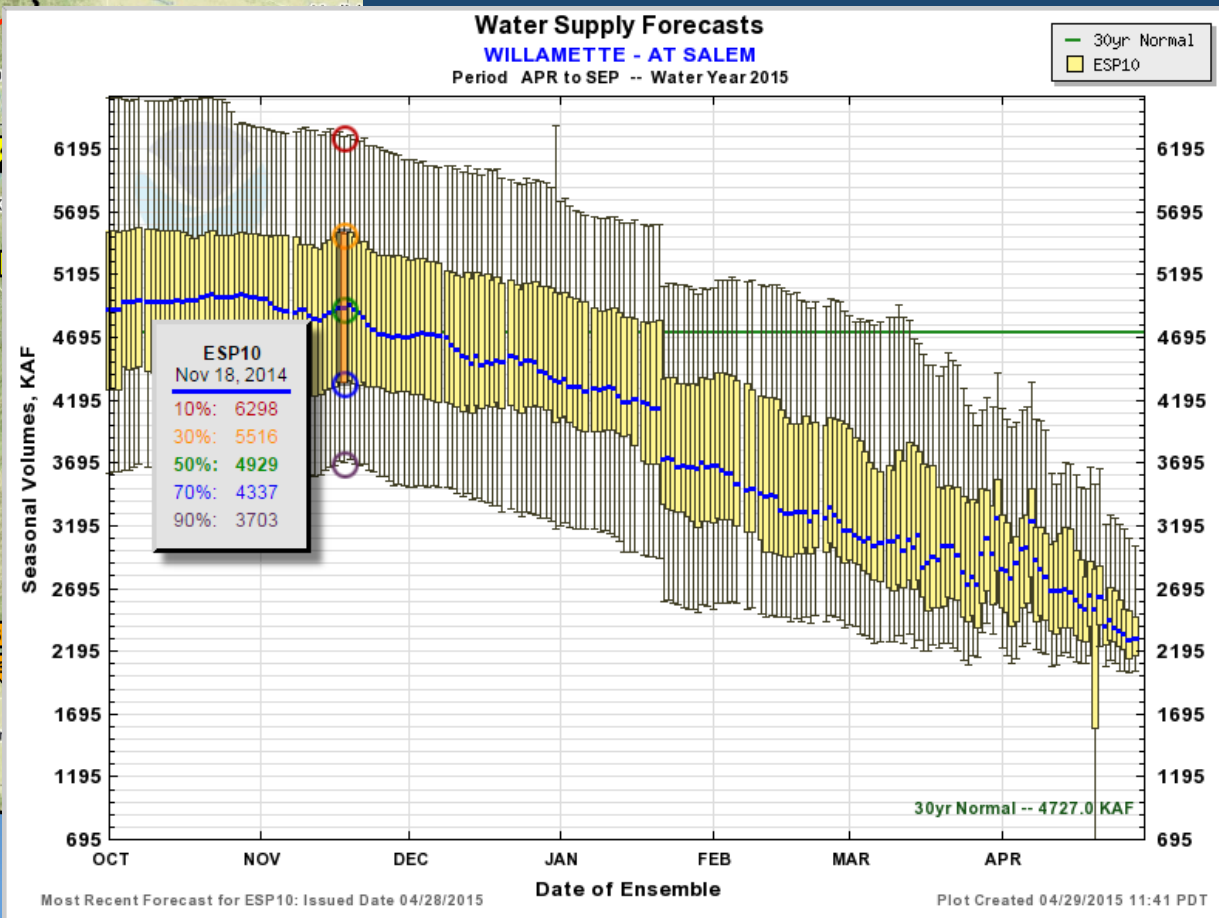
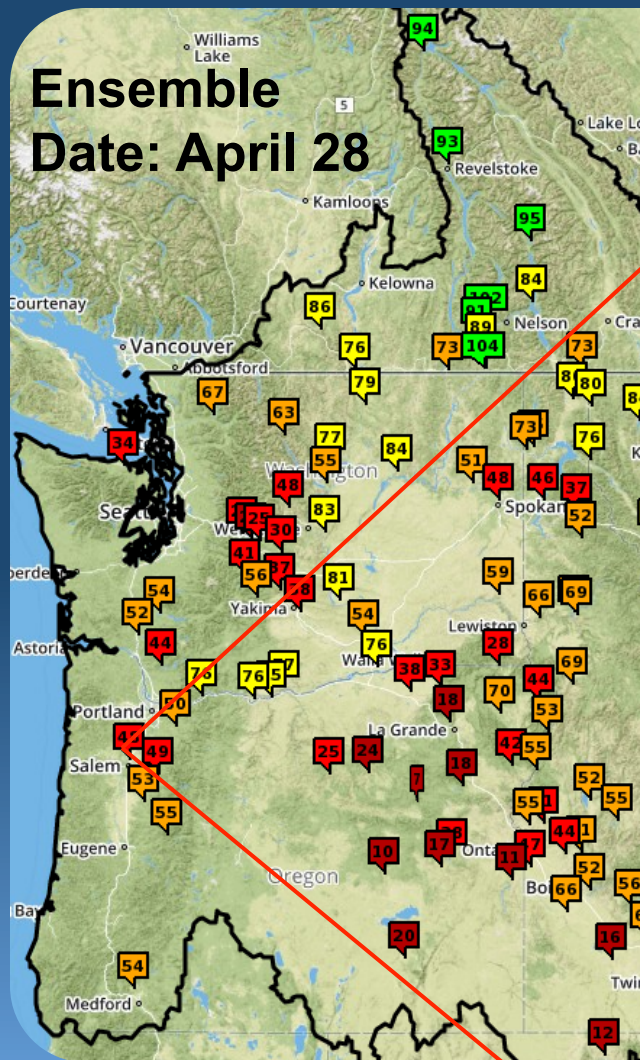
**Owyhee River below
Owyhee Dam**



Official Water Supply Forecasts

Ensemble
Date: April 28

Willamette River at Salem



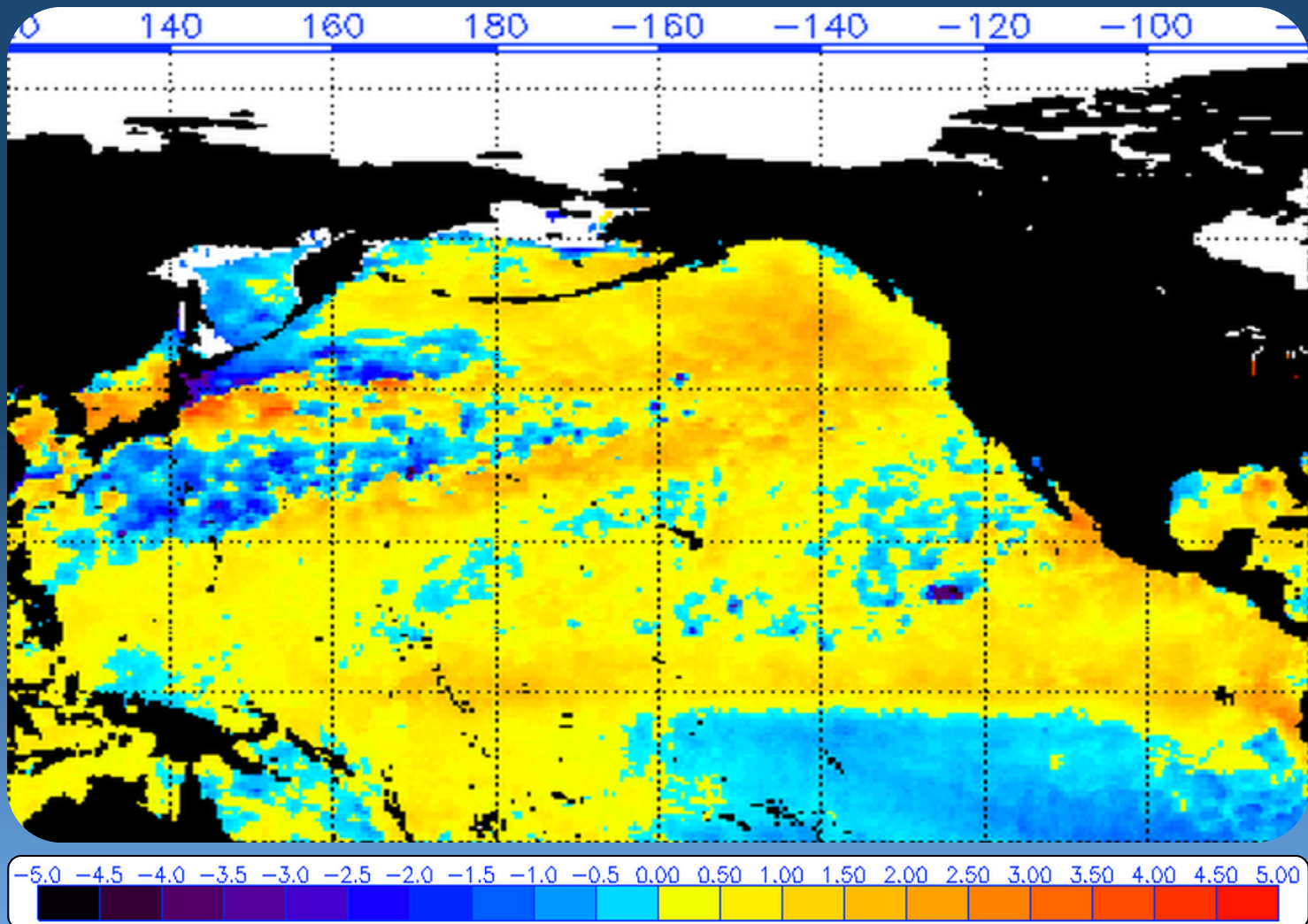


ENSO Status & Summer Outlook

- El Niño conditions are present (El Niño Advisory)
- Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean
- There is an approximately 70% chance that El Niño conditions will continue through Northern Hemisphere summer 2015, and a greater than 60% chance it will last through autumn

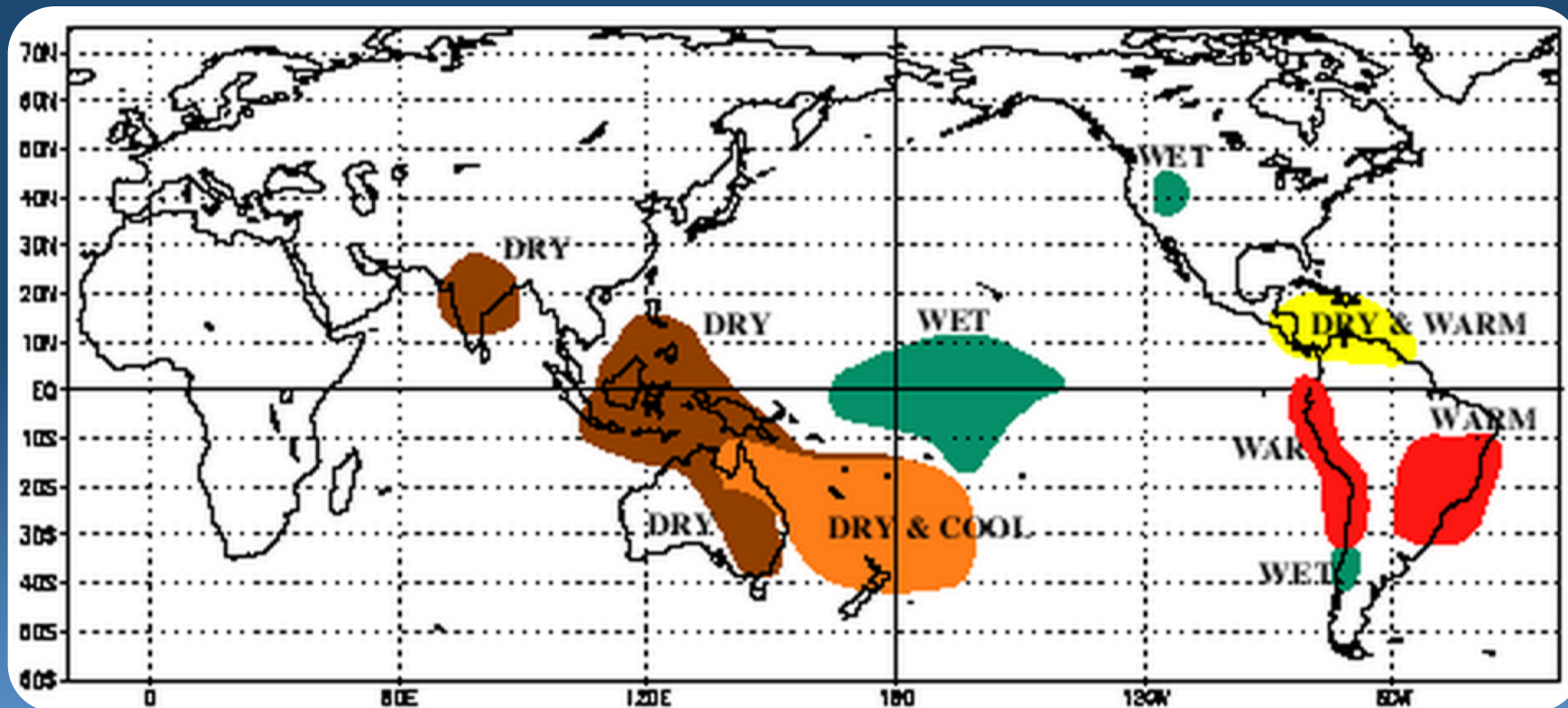
ENSO Status & Summer Outlook

SST Anomaly (C) April 28, 2015



El Niño Summer Impacts

June - August Relationships

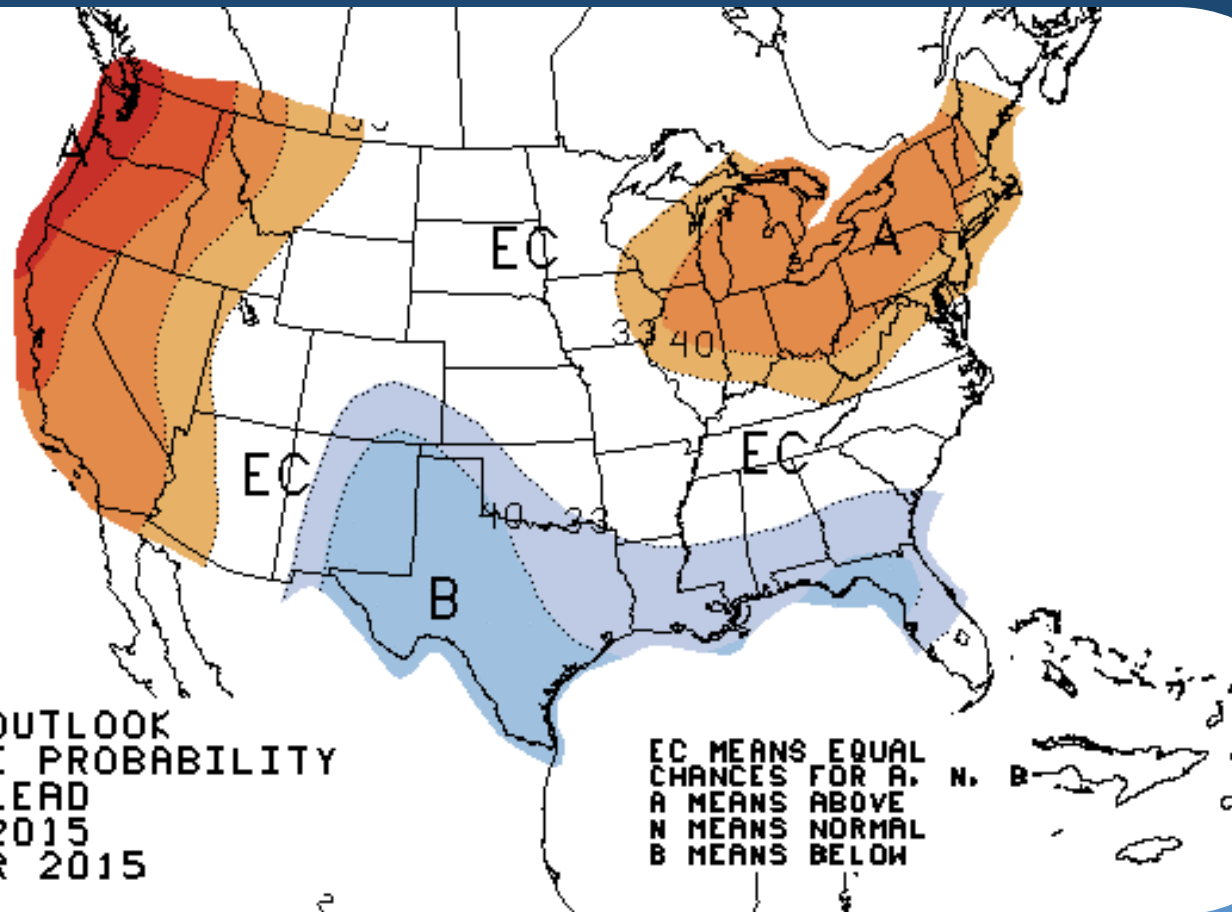


Temperature Outlook

May 2015



ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID MAY 2015
MADE 30 APR 2015

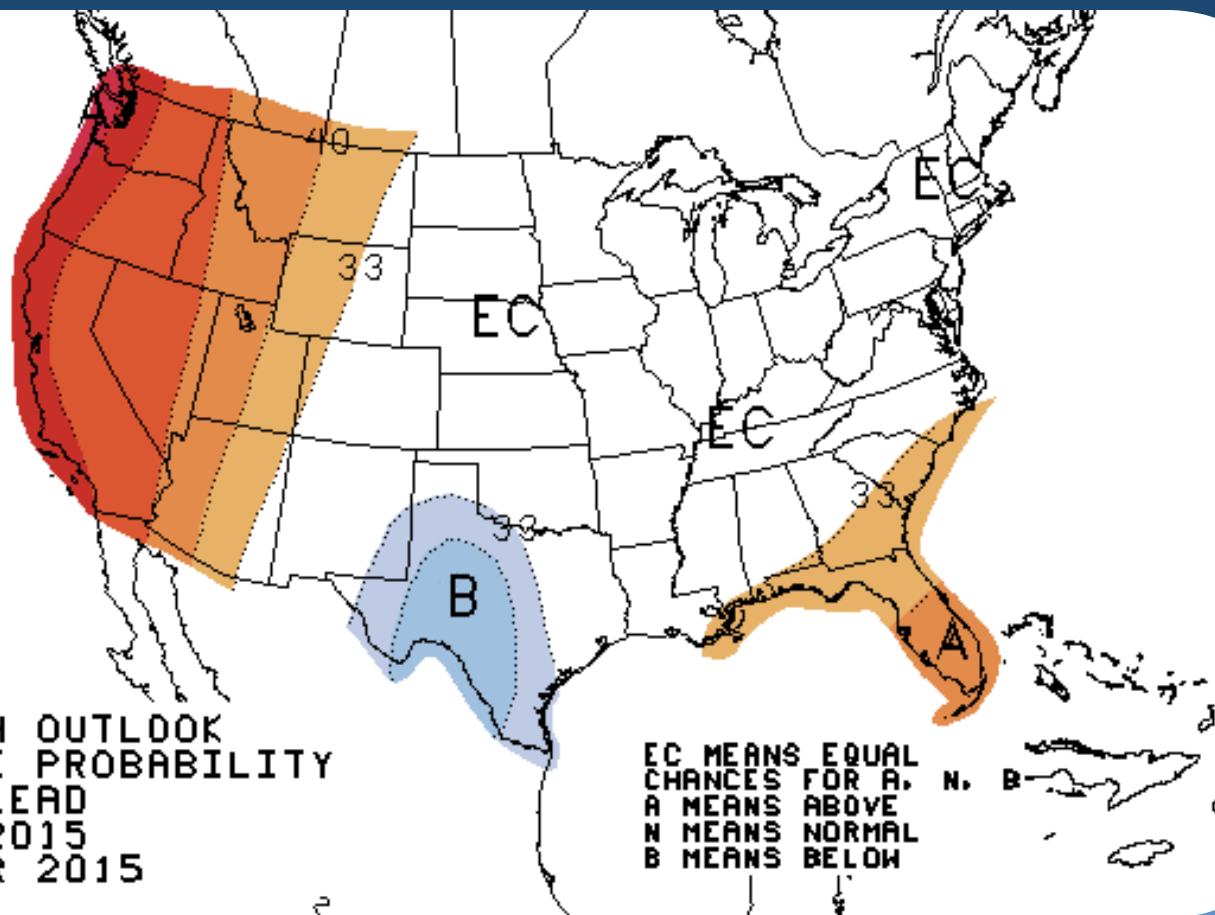


Temperature Outlook

Jun-Jul-Aug 2015



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
1.5 MONTH LEAD
VALID JJA 2015
MADE 16 APR 2015

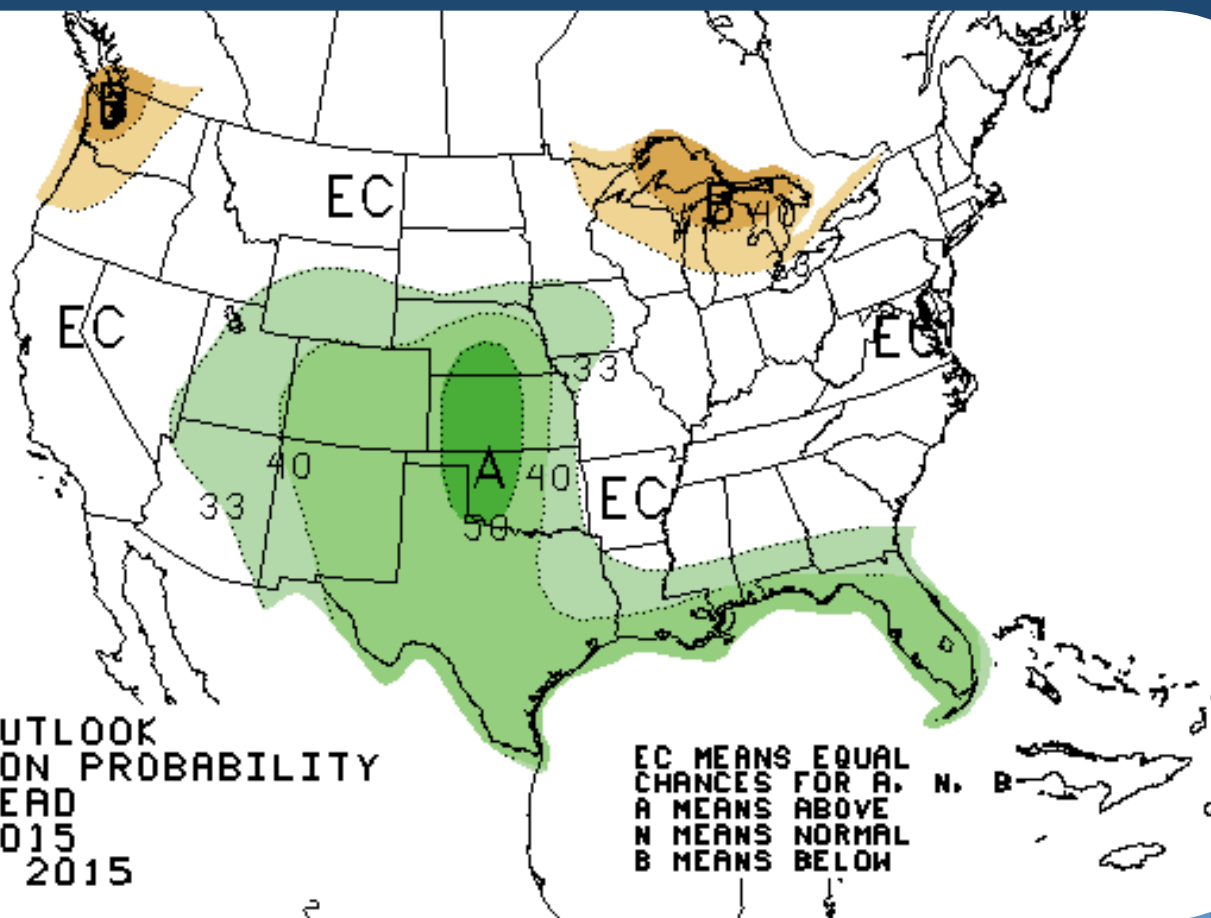


Precipitation Outlook

May 2015



ONE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.0 MONTH LEAD
VALID MAY 2015
MADE 30 APR 2015

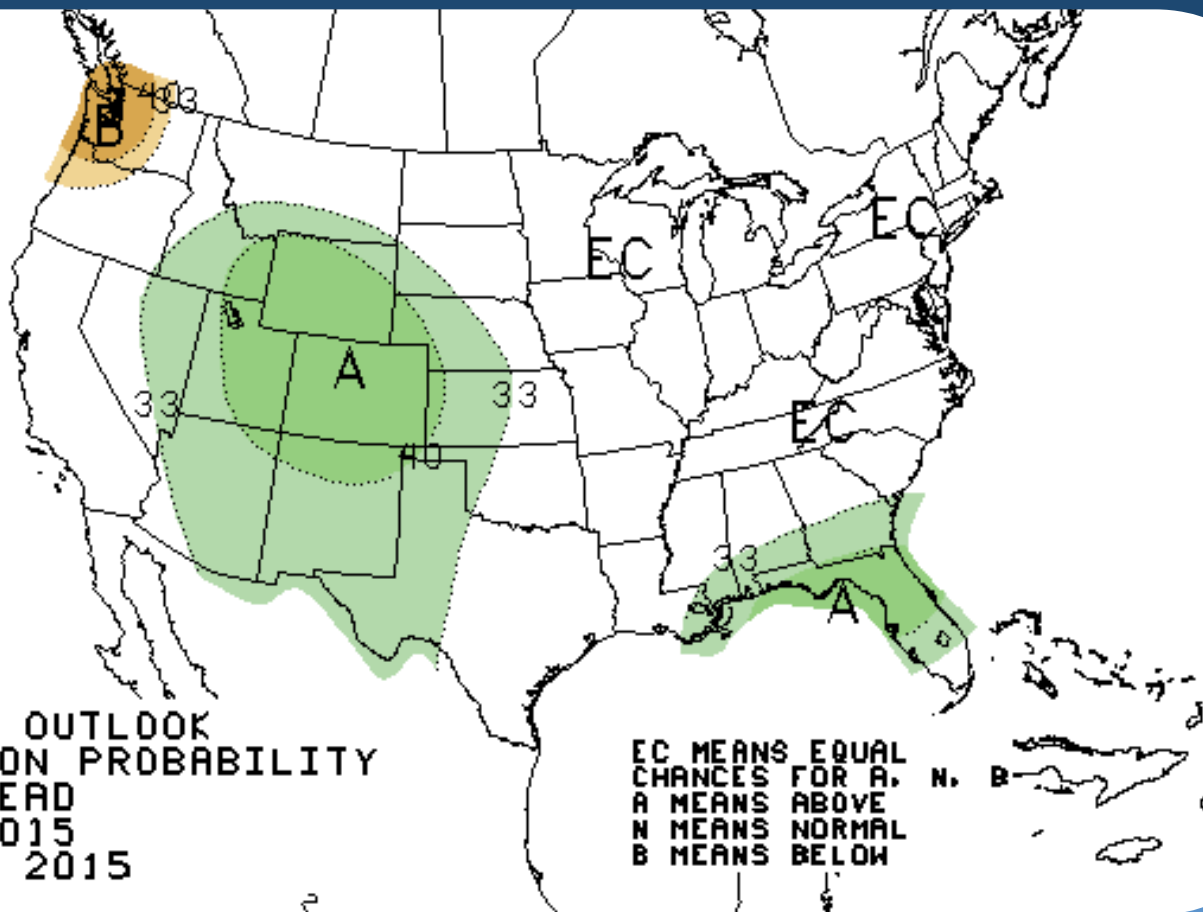


Precipitation Outlook

Jun-Jul-Aug 2015



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
1.5 MONTH LEAD
VALID JJA 2015
MADE 16 APR 2015





End



Bruneau River near Hot Springs Sep 12, 2013